



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0795; Project Identifier 2019-CE-054-AD; Amendment 39-21837; AD 2021-24-16]

RIN 2120-AA64

Airworthiness Directives; Daher Aerospace (Type Certificate Previously Held by SOCATA) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Daher Aerospace (type certificate previously held by SOCATA) Model TB 20 and TB 21 airplanes. This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cracks on the main landing gear (MLG) legs. This AD requires repetitively inspecting the MLG and performing all applicable corrective actions. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Daher Aircraft Inc., Pompano Beach Airpark, 601 NE 10 Street, Pompano Beach, FL 33060; phone: (954) 893-1400; website: www.tbm.aero. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA,

call (816) 329-4148. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0795.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0795; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the MCAI, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Gregory Johnson, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (720) 626-5462; fax: (816) 329-4090; email: gregory.johnson@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Daher Aerospace (type certificate previously held by SOCATA) Model TB 20 and TB 21 airplanes. The NPRM published in the *Federal Register* on September 17, 2021 (86 FR 51840). The NPRM was prompted by MCAI originated by the European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA issued AD 2019-0274, dated November 6, 2019 (referred to after this as “the MCAI”), to address an unsafe condition on all Daher Aerospace (formerly SOCATA) Model TB 20 and TB 21 airplanes. The MCAI states:

Occurrences have been reported of finding cracks on MLG legs of TB 20 and TB 21 aeroplanes.

This condition, if not detected and corrected, could lead to structural failure of an MLG leg and consequent MLG collapse, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, DAHER Aerospace issued the [service bulletin] SB to provide inspection instructions.

For the reasons described above, this [EASA] AD requires repetitive special detailed inspections (SDI) using magnetic particle method of the affected MLG area, and, depending on findings, accomplishment of applicable corrective action(s).

You may examine the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0795.

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information under 1 CFR Part 51

The FAA reviewed Daher Aerospace Service Bulletin SB 10-154-32, dated September 2019. The service information contains procedures for repetitively inspecting the MLG area for cracks and performing any rework and repair. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 52 airplanes of U.S. registry. The FAA also estimates that it would take about 8 work-hours per airplane to perform the magnetic particle inspection required by this AD. The average labor rate is \$85 per work-hour.

Based on these figures, the FAA estimates the inspection cost of this AD on U.S. operators to be \$35,360, or \$680 per airplane, per inspection cycle.

In addition, the FAA estimates that any necessary rework would take 12 work-hours and require parts costing \$400, for a cost of \$1,420 per airplane. The FAA has no way of determining the number of airplanes that may need these actions. If the reworked MLG area is found damaged during a follow-on magnetic particle inspection, because the damage may vary considerably from airplane to airplane, the FAA has no way of estimating this repair cost.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-24-16 Daher Aerospace (Type Certificate Previously Held by SOCATA):

Amendment 39-21837; Docket No. FAA-2021-0795; Project Identifier 2019-CE-054-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Daher Aerospace (type certificate previously held by SOCATA) Model TB 20 and TB 21 airplanes, all serial numbers, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 3200, Landing Gear System.

(e) Unsafe Condition

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cracks on the main landing gear (MLG) legs. The FAA is issuing this AD to prevent structural failure of an MLG leg and consequent collapse of the MLG. The unsafe condition, if not addressed, could result in damage to the airplane and injury to occupants.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Repetitive Inspections

(1) Before the MLG exceeds 16,000 landings since first installation on an airplane or within 200 landings after the effective date of this AD, whichever occurs later, and thereafter at intervals not to exceed 3,200 landings, accomplish the magnetic particle inspection on each MLG for cracks in the left-hand and right-hand MLG leg and take all applicable corrective actions before further flight in accordance with the Description of Accomplishment Instructions in Daher Aerospace Service Bulletin SB 10-154-32, dated September 2019, except you are not required to contact the manufacturer. Instead, repair using a method approved by the Manager, International Validation Branch, FAA; the European Union Aviation Safety Agency (EASA); or Daher Aerospace's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature. For a repair to be approved as required by this paragraph, the approval letter must specifically refer to this AD.

(2) For the purposes of this AD, any maneuver resulting in weight on the MLG for any duration of time after initial takeoff counts as a landing. If the number of landings for the MLG is unknown, multiply the number of airframe hours by a factor of 3.6 and round up to the nearest whole landing.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i)(1) of this AD or email: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Gregory Johnson, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (720)-626-5462; fax: (816) 329-4090; email: gregory.johnson@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2019-0274, dated November 6, 2019, for more information. You may examine the EASA AD in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0795.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Daher Aerospace Service Bulletin SB 10-154-32, dated September 2019.

(ii) [Reserved]

(3) For service information identified in this AD, contact Daher Aerospace Inc., Pompano Beach Airpark, 601 NE 10 Street, Pompano Beach, FL 33060; phone: (954) 893-1400; website: <https://www.tbm.aero>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on November 17, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-26964 Filed: 12/13/2021 8:45 am; Publication Date: 12/14/2021]